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# MENTAL HEALTH OF CHILD WORKERS

## Results from a case control study of the brick manufacturing industry in four countries

Catherine PELLENQ\*, Susan GUNN\*\*, Janessa GRAVES\*\*\*, Mohammed VAQAS ALI\*\*\*\*

### BACKGROUND

Internationally, brick kilns employ tens of thousands of children. Due to extreme poverty facing families who work in this industry, child labor in this sector has been challenging to eliminate. If work has well known effects on physical health of the children, does it affect their mental health as well? One reason that there is little hard evidence of the impact of work on psycho-social development of children is because there has been no methodology for assessing it. This cross-national, field-based study was conducted by the International Labour Organization in four countries – Afghanistan, Bangladesh, Nepal, and Pakistan – to address this issue.

#### OBJECTIVES

1. developing and testing a questionnaire that can be used cross-culturally and by non-professionals to assess the psychosocial health of working children
2. determining the nature and extent of the impact of work on children's psychosocial functioning and development by comparing working children with non-working controls

### METHOD

Working children were identified from up to 3 brick kiln sites in each country. They were compared to non-working controls recruited from nearby communities. Clinical tests, observational risk assessments, and 4 translated, semi-structured questionnaires were administered to the children outside the worksite.

Screening		Contents
Clinical tests		Height, pulmonary, skeletal, blood, injury marks
4 Questionnaires	socio-demog	Age, sex, schooling, family
	work	Duration, other work, domestic service
	health	Injuries, illness, incidents, fatigue
	psycho-social	Stress, self esteem, supervision at work. Emotional, maltreatment, personal security, personal agency, social integration, anxiety, hope and helplessness

The IPAC (Instrument for the Psychosocial Assessment of Children at Work) was developed to collect working children's perceptions on different areas of their lives and is composed of 48 items (17 specific for working children). The children's responses were tabulated on a frequency Likert scale (never, sometimes, often and always). Pictograms could be used to facilitate answering of younger children.



Participants: 1608 children (11-17 yrs) were randomly selected from brick kilns in the 4 countries. 918 of these were working children who have worked at least 2 years in the brick kilns. 565 were non-working controls matched for age, sex, economic level, migration status, ethnic, social or linguistic group.

Country	Working children	Non-Working controls	Total
Pakistan	251	89	465
Afghanistan	399	329	728
Nepal	198	107	305
Bangladesh	70	40	110
Total	918	565	1608

### RESULTS 1

#### 1. Validation of the tool

38 items were kept; the reliability for the tool was quite good (alpha of Cronbach >.80) and varies among countries from .71 to .87.

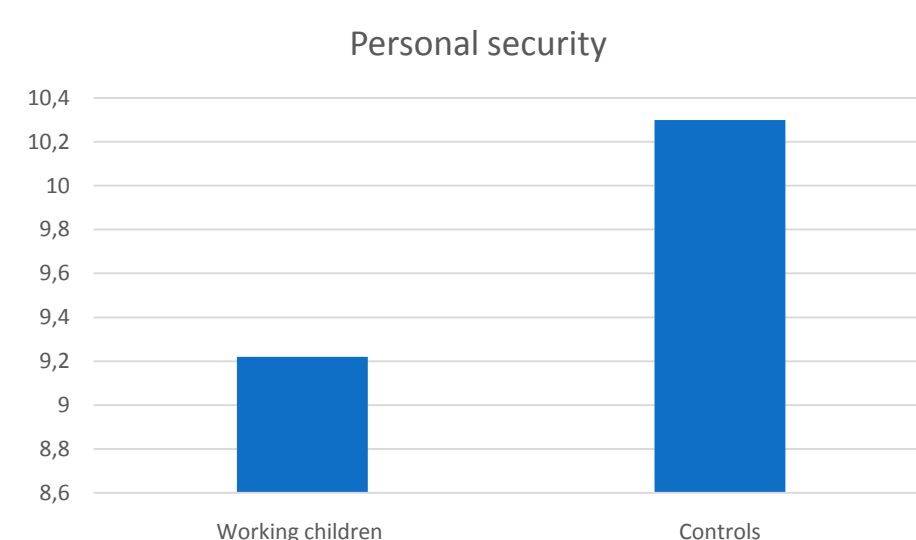
A Principal Component Analysis (Varimax after rotation) identified 6 main factors: 3 concerning all children, 3 concerning only working children.

6 MAIN FACTORS	Examples of questions	Load on factor
Stress at work	Do you get bored at work doing the same thing for many hours in a row?	.729
	Do you feel under pressure to work faster and harder?	.671
Self-esteem at work	Do you feel like you have the skills needed to do your job well?	.702
	Do you think others appreciate the work you do?	.670
Supervision at work	Do people at work teach you what to do and how to do it?	.803
	At work do you feel that people watch on you to make sure you don't get hurt?	.796
Personal security	Do you feel supported and loved by your family?	.777
	Do you feel tension in your body?	.455
	Do you get beaten at home or work?	.420
Negative emotions	Do you get very angry and often lose your temper?	.723
	Do you get into fights or quarrels easily?	.531
	Do you think back about all the bad things that have happened to you?	.443
Maltreatment	Have you been severely punished for mistakes made at your work?	.788
	Do you get scolded, or criticized or made to feel small or stupid?	.685
	Do you people reject or tease you or call you names?	.402

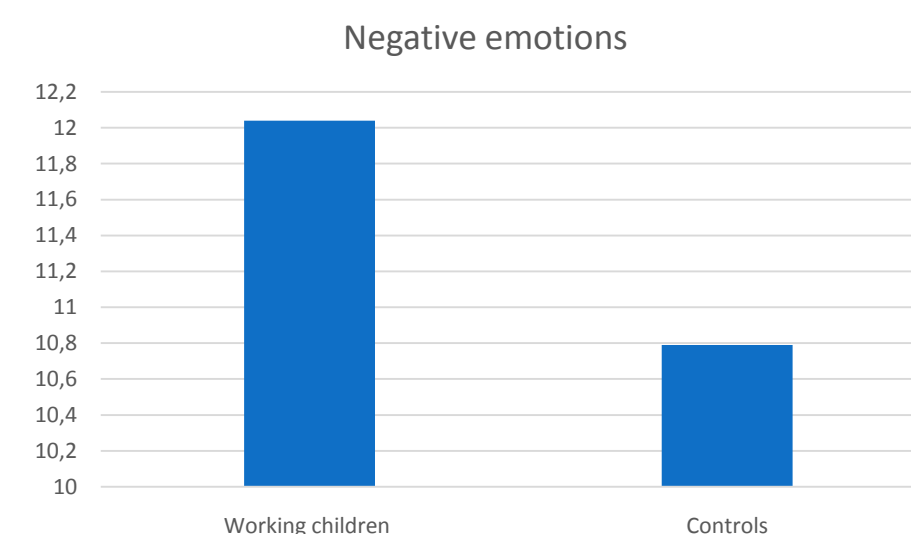
These results show that IPAC is a valid tool for measuring psychosocial well-being of working children. It can be used in other settings and with other occupations.

### RESULTS 2

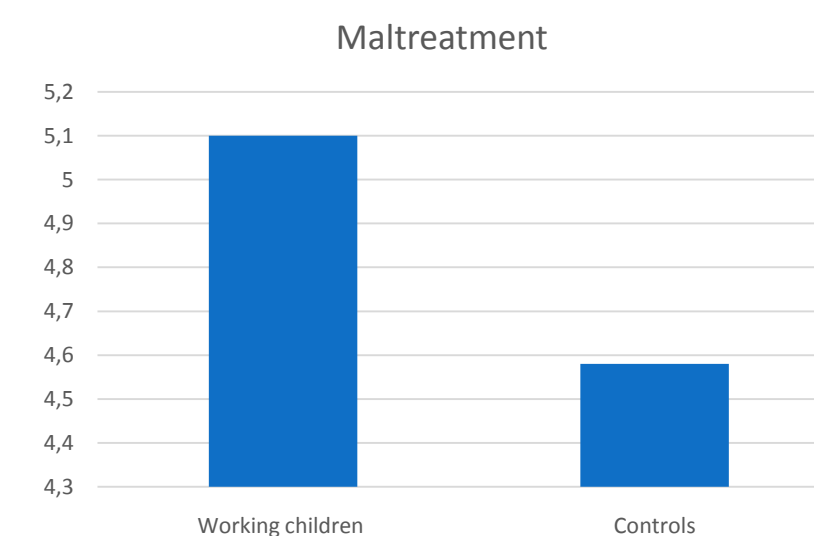
#### 2. Differences between working and non-working children on the three last psychosocial factors (variance analysis)



Lower personal security. Significant difference.  $F(1455,1)=87,13$ ,  $p<.000$



Higher negative emotions. Significant difference.  $F(1448,1)=64,33$ ,  $p<.000$



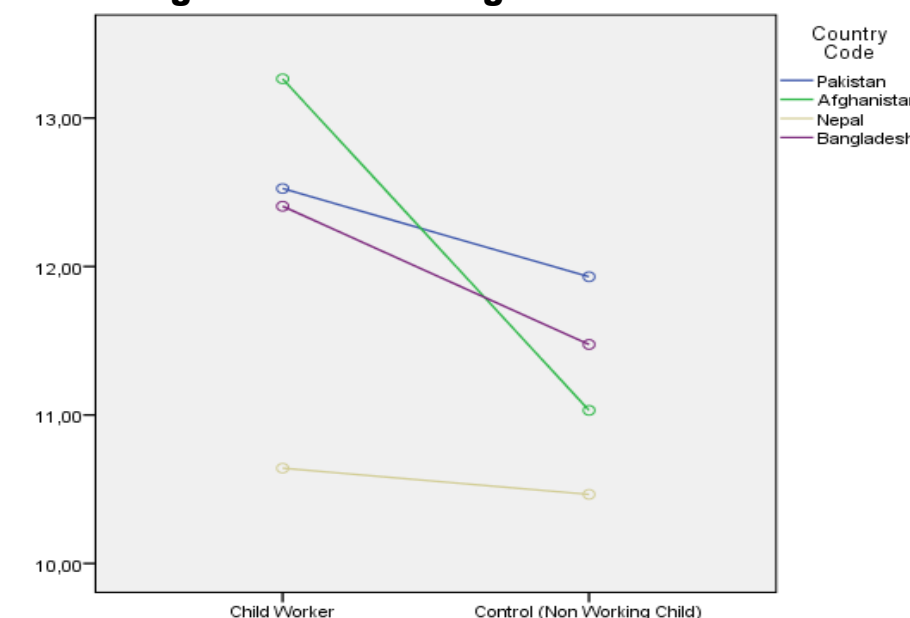
Higher feeling of maltreatment. Significant difference.  $F(1469,1)=44,78$ ,  $p<.000$

**COMPARED TO THEIR NON-WORKING PEERS, CHILD BRICK KILN WORKERS FEEL SIGNIFICANTLY LESS SECURE AND EXPERIENCE MORE NEGATIVE EMOTIONS AND MALTREATMENT**

This conclusion is derived from the global analysis of the data (and is confirmed by regression analyses not presented here). There are also indications of interacting effects of other variables.

For example, our data indicate that, compared with other countries, Afghanistan shows considerable difference between working and non-working children on negative emotions.

Marginal means of negative emotions



### RESULTS 3

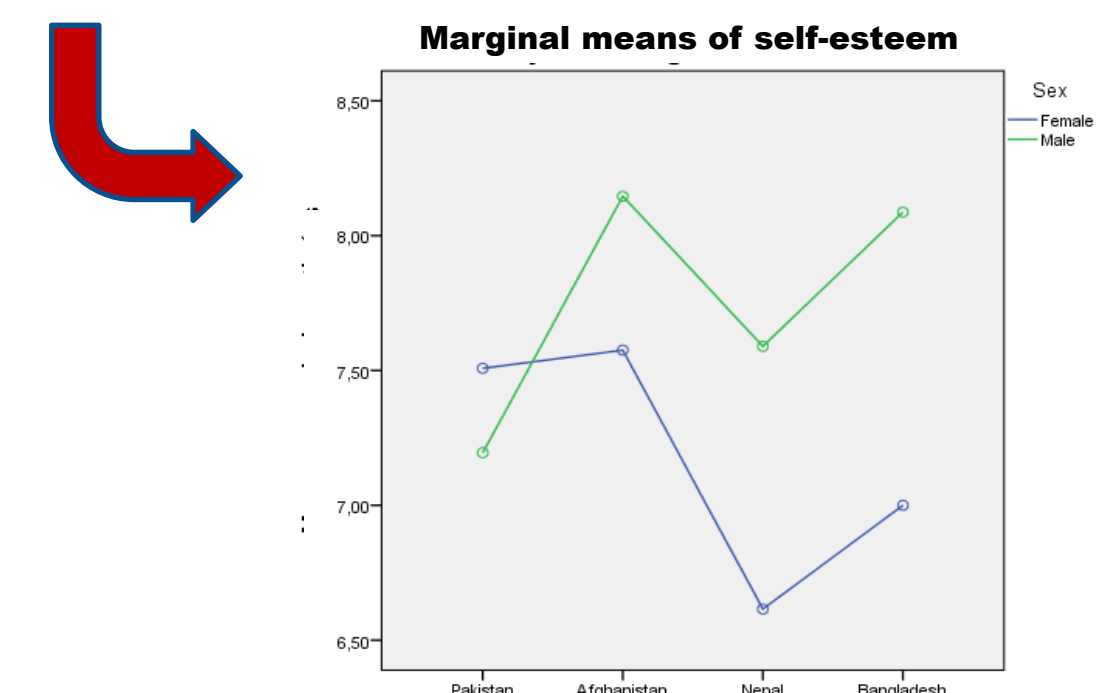
#### 3. The mental health of working children

Brick kiln workers have also **low self-esteem** (80% are never proud of their work, 73% feel they do not have the skills needed to do the job well). They are likely to **experience stress** (60% feel tired because of long or heavy work, get bored at work doing the same thing, 82% have no free time).

They may be suffering more injuries from **lack of supervision** (72% feel nobody watches over them to make sure they do not get hurt, 68% feel no one teaches them what to do and how to do).

**Low personal agency:** they feel unable to influence what is happening to them (66% feel that they cannot choose what to do or not to do).

As for the country variable, there are indications in our data of interactional effects between psychosocial factors and sex for the working children: eg. girls have lower self-esteem at work (except in Pakistan).



### CONCLUSIONS

As a result of this study, it is obvious that there is a negative impact of early brick kiln work on psychosocial development. There is also some indication, however, that other variables such as sex, country, age, work intensity, schooling, familial and social support may modulate these effects to some extent but further work is required to demonstrate this conclusively.

This evidence-based study provides new rationale and impetus for parents, brick kiln operators, and policy makers who seek to remove children from this work.

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